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10/051,093	01/18/2002	Santosh C. Lolayekar	E003 - 1003US0	3414

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PALO ALTO, CA 94306-2047

EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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10/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/051,093

Applicant(s)

LOLAYEKAR ET AL.

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 8/9/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) 31-43 and 54-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 and 44-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/7/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

The disclosure is objected to because of the following informalities: the applications serial numbers on page 1, lines 20-40 must be filled in the blanks .

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11, 13-20, 22-25, 29, 30, 44, 47-50 and 53 are rejected under 35 USC 103(a) as being unpatentable over Buckman et al. ( US pat. 7,095,715 B2).

Note, the specification defines in page 6, lines 10-15 the storage switch as a multi-protocol SAN and process data at wire speed. Further, in page 29, paragraph [0116], non-data packet is defined as "type of packet" based upon type field specified in the packet header. Therefore, examiner uses the node 10 shown in figure 2 as a storage switch because it classifies and processes received packets at line speed (see col.6, lines 55-62); and "type of packet" detected by the classify engine 14 of Buckman as "non-data packet".

In claims 1, 4, 5, 6, 7, 13, 16, 20, 24, 44, Buckman et al. discloses a method for use by a storage switch (see fig.2, node 10) comprising:

receiving a plurality of packets by the switch (see fig.2; col.4, lines 65-67; receiving packets 12); classifying data packet and communicating the data packet to a second device (see fig.2, classifier engine 14 classifies packets 12 and passes VOIP packets to audio mixer in packet process engine 16 to have a conference call); classifying non-data packets (see fig.2, col.4, lines 50-60; classify engine 14 detects a specific type of packet according packet 's protocol types, header 's fields). It is shown in Buckman et al. that node 10 provides packet processing, classifying via separate control path and data path ( see col.4, lines 25-52); where in the control path is established by controller 22 to interface with classify engine 14. Therefore, it would have been obvious to communicate type of packets on the control path to the controller 22 ( communicating non-data packet to a first device). One skilled in the art would be consider that the non-data path or type of packet being communicated via the control path to the controller 22 of Buckman et al. once the received packets are classified. The motivation is to increase transmission speed for data packet.

Buckman et al. does not explicitly disclose said steps of classifying is performed without buffering of the packets.

Note, as shown in specification, page 6, paraggrphs [0015];[0062] “processing packet without buffering the packet” is to process packet at wire speed with minimal time or no latency. Therefore, by line speed operation at the node 10 addressed above in (see col.6, lines 55-62); the node 10 is well-known in the art to classify packets at high speed; minimal delay ( see Buckman ; col.2, lines 61 to col.3, line 10) without buffering the packets.

\*In claims 14, 22 and 30, the limitations of these claims have been addressed in claim 1.

\*In claims 11, 48, Buckman et al. discloses utilizing a local header for the packet,

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wherein the local header includes information indicating if the packet is a data packet or a non-data packet ( see fig.2, col.4, lines 51-65; packets are classified based on header fields, packet contents or payload).

\*In claim 8, Buckman et al. discloses the second device is external to the switch (col.7, lines 5-10; the classified packets 12 can be switched to be forwarded to shaper engine 18 which is a routing switch processor).

\*In claim 9, 18, 47 and 53, Buckman et al. discloses data packets are for established connection (see col.5, lines 55-58; classify engine 14 monitors request and responses to allow new data flow), are for recognized protocol (see col.4, lines 55-62; classifying packets based on protocol type), and are data moving packets ( see col.7, lines 10-20; voip packets).

\*In claims 15, 23, 29 and 49, Buckman et al. discloses the steps of claim 1 are performed by a storage processor in the switch ( packet processor 16 of node 10; see fig.2, col.7, lines 1-18).

\*In claims 2, 3, 10, 17, 19, 25, 44, 50 Buckman et al. discloses classify engine 14 detects TCP request packet associated with TCP connections ( see col.5, lines 25-30; data packets form a data request).

Claims 26, 27, 45, 46, 47, 51, 52 are rejected under 35 USC 103(a) as being unpatentable over Mahajan et al. ( US Pat. 6,804,236 B1) in view Wilford ( pat. 6687247 B1).

\*Claims 26, 27, 45, 46, 51, 52 are rejected under 35 USC 103(a) as being unpatentable over Buckman et al. ( US pat. 7,095,715 B2) in view of Wilford et al. ( US pat. 6,687,247 B1).

\*In claims 26, 27, 45, 46, 51 and 52, Buckman does not disclose the second device is on a line card. But Buckman et al. discloses the audio mixer (second device) is located on a processor blade 32. Wilford et al. discloses the second device is on the linecard (see fig.1, fabric interface 170 on linecard 110; col.6, lines 5-10); or external to the linecard (fig.1, fabric 120 external to linecard 110). Therefore, it would have been obvious to one skilled in the art to locate the audio mixer on the line card of Wilford in order to connect to a plurality devices.

Claims 12, 21 and 28 are rejected under 35 USC 103(a) as being unpatentable over Buckman et al. (US Pat. 7,095,715 B2) in view of Grosner et al. (US Pat. 7,089,293 B2).

In claims 12, 21 and 28, Buckman et al. does not disclose processing data packets in accordance with a virtualization function. Grosner et al. discloses, in fig.1, a storage network 100. The storage networks performs virtualization function 508 for request packets (see fig.5; col.6, lines 35-45). Therefore, it would have been obvious to use the virtualization function in Buckman et al. to process packets. The motivation is to provide physical resource, translate protocols.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-30 and 44-53 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eberle et al. (US pat. 6,975,626 B1);

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Thursday from 8:30 to 4:30. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached on 571 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen

A handwritten signature in black ink, appearing to read 'HNguyen', with a stylized, cursive script.

**HANH NGUYEN  
PRIMARY EXAMINER**